

**GRE Informal Working Group on
Simplification of the UN Lighting and Light Signalling Regulations (SLR)**

65th meeting

Brussels, 13-15 December 2023

REPORT

		Documents
1.	Welcome and opening remarks The Chairman opened the meeting by welcoming all the participants to the 65 th SLR session. He informed that this SLR session has been preceded by a new ad-hoc expert meeting on UN Regulation No. 86 (<i>see item 6 of this Report</i>).	
2.	Introduction of participants and organisations A list of all participants is available in Annex 1 to this Report.	
3.	Adoption of the agenda The agenda was adopted with the insertion of new documents. A revised agenda, reflecting the agreed modifications, was circulated as document SLR-65-03/Rev.1.	SLR-65-03
4.	Approval of the reports of the previous sessions - Report 61 st meeting - Brussels (BE), 22-24 March 2023 - Report 62 nd meeting - Brussels (BE), 26-28 June 2023 - Report 63 rd meeting - Brussels (BE), 30 August - 1 September 2023 - Report 64 th meeting - Brussels (BE), 8-10 November 2023 The approval of the last SLR reports was postponed to the next session.	SLR-61-10 SLR-62-16 SLR-63-10 SLR-64-12
5.	Extension of SLR mandate SLR reviewed and improved the draft document, including justification, to request GRE an extension of the mandate until 2027, as reflected in SLR-65-02/Rev.1. All SLR members are invited to review this document and to provide feedbacks. This item will be on the agenda for SLR-66.	SLR-65-02
6.	Outcome Ad-hoc expert meetings on UN Regulation No. 86 SLR took note of the results of the 2 nd ad-hoc expert meeting on R86, held prior to SLR-65 with the purpose to assist CEMA to finalise a revised proposal for submission to GRE-90, based on document GRE/2023/12 and including “Device transition” (doc. WP.29/2023/93). CEMA will further work on the revised proposal together with Germany and, after an editorial check, send the revised proposal to GRE-90.	

7.	<p>Stage 2 / Step 2 - Specific items or general topics for consideration</p> <p><i>Note from SLR-64: all SLR members (both CPs and NGOs) were reminded to study doc. SLR-64-01 and to provide input on contents of the specific items marked in green colour.</i></p> <ul style="list-style-type: none"> - Grouping and prioritising of topics <p>SLR-64-01/Rev.1 is the latest consolidation of all topics for Stage 2 / Step 2, reflecting the status as at the end of SLR-65. All SLR members (both CPs and NGOs) were reminded, once again, to study this document and to provide input on contents of the specific items marked in green colour.</p>	SLR-64-01/Rev.1
7.1	<p>Stage 2 / Step 2 – Documents for information and reference</p> <ul style="list-style-type: none"> - Dutch presentation on Apparent surface - SAE International presentation on “Effective Projected Luminous Lens Area” (EPLLA) - Dutch input on specific items: Apparent surface - Appearance of signal lamps (experimental study in 2011) - Apparent surface; Measurement approach - Dutch discussion document on Apparent Surface - Apparent surface and angles of geometric visibility in R48 - General review of Reg. 48 	SLR-54-08 SLR-54-14 SLR-57-03 SLR-58-05 SLR-61-05 SLR-61-03 SLR-62-14 SLR-61-02/Rev.3
7.2	<p>Stage 2 / Step 2 – New input for SLR-65:</p> <ul style="list-style-type: none"> • Baseline document for Stage 2 / Step 2 work on Reg. 48 <ul style="list-style-type: none"> ○ How to finally present the package of proposals to GRE after finalisation of the work • Harmonisation of requirements – “Prohibited if not allowed” <ul style="list-style-type: none"> ○ Officers’ paper for R48, as amended during SLR-64 ○ Use cases allowed in Germany according to national legislation ○ OICA input for consideration • Apparent surface <ul style="list-style-type: none"> ○ SAE justification for minimum 50 cm² required EPLLA for a stop and rear turn signal lamps ○ Input from The Netherlands for consideration ○ OICA input for consideration • IEC draft proposal to address technology neutrality for light sources <ul style="list-style-type: none"> ○ IEC paper to support the proposal ○ Replaceability of light source modules • Revised proposal from Germany, based on SLR-64-06/Rev.1, to improve the visibility of DI (including justification for the values proposed and clarification of the issue intended to be solved) • IMMA updated document, based on SLR-63-08 and the analysis shown at SLR-64, on potential improvements of the definitions in Regs. 53 and 74. <p>Document SLR-65-10 is the latest baseline document for Reg. 48, reflecting all the modifications and improvements agreed as at the end of SLR-65. All SLR members were invited to use this document for any further proposal to SLR concerning Reg. 48.</p>	SLR-65-10 SLR-64-02/Rev.1 SLR-65-01 SLR-65-09 SLR-65-06 SLR-64-04 SLR-65-04 SLR-65-05 SLR-65-08

SLR considered how to present the package of proposals to GRE after finalisation of the work and concluded that, in those cases where significant modifications will be proposed (such as for Reg. 48), the most suitable way for the sake of clarity and readability would be to provide “clean” formal documents with justification, supported by commented informal documents to illustrate the main changes. It was agreed to report this to GRE-90 as part of the usual progress report.

SLR Officers volunteered to cross-check the contents of the R.E.3 “Rev.3” vs. “Rev.7” and to provide feedback for SLR-66.

OICA will produce all the Figures in Reg. 48 in editable format. The files will be provided for the future SLR sessions and, as they will become available, they will be inserted in the baseline document.

The SLR Officers presented an updated draft proposal for Reg. 48 (doc. **SLR-64-02/Rev.1**), suggesting to clarify that devices not allowed in the Regulation are prohibited (in line with Par. 5.17. of Reg. 53). The proposal, reflecting all the improvements agreed at SLR-64, was discussed by SLR and further improved with the input from the participants. In the discussion, the German input addressing the use cases allowed in Germany according to the national legislation was also considered (doc. **SLR-65-01**).

The expert from OICA presented a discussion document summarising its main concerns and including a draft counterproposal (doc. **SLR-65-09**).

The discussion will continue at the next session on the basis of document **SLR-64-02/Rev.2**, including also the OICA draft counterproposal and the aforementioned German input.

Regarding the subject “apparent surface”, the expert from The Netherlands introduced a draft proposal for simplification including justification and an example (doc. **SLR-65-06**).

Mr. Grigorescu recalled the problem of geometric visibility as summarised in doc. SLR-62-14 and asked to take this issue into consideration as well.

In the discussion it was observed that a new wording (name) should be used to identify the “new” apparent surface resulting from the merging of the “light emitting surface” and “illuminating surface”. However, as all the ramifications of this merging need to be carefully considered, it was agreed to keep the current wording (name) for the time being and first to further develop the new ideas/proposals.

It was also noted that it is difficult to start a new design based only on luminance simulation since it is not simple to determine how close it will be to the actual photometry of the lamp.

Netherlands will provide an improved version of SLR-65-06 for consideration at SLR-66, taking into account the feedbacks received during SLR-65.

	<p>The expert from Germany introduced a revised draft proposal for UN Regulations Nos. 48 and 148, based on SLR-64-06/Rev.1, to improve the visibility of rear direction indicators (doc. SLR-65-08).</p> <p>The expert from The Netherlands suggested, if possible, to consider introducing a formula with a factor that would adapt the intensity of the direction indicator according to the distance and intensity of the near lamps.</p> <p>The expert from SAE observed that, from a simplification perspective, all the categories should be deleted and only one intensity that would fit all cases (the highest one) should be considered, however he recognised that such a solution would unnecessarily increase the costs. If all the categories are to be maintained, then the new ones proposed in Table 8 of Reg. 148 shall also be indicated in Table 1.</p> <p>Germany will prepare an updated proposal for the next SLR session, based on SLR-65-08 and taking into consideration the comments made during SLR-65.</p> <p>On the subject “technological neutrality for light sources”, SLR agreed that the replaceability of light source modules should be tackled in the device regulations (R148 and R149) as part of the future 02 series of amendments.</p> <p>IEC will prepare for SLR-66 an updated discussion paper, reflecting the conclusions on Par. 2.10.1. and 5.29. (see SLR-65-04 and SLR-65-05). Revised proposals for device regulations, and for Reg.48, will be prepared for consideration at the subsequent (67th) SLR session. The data in Table 1 of IEC 60809 should be reproduced in the pertinent device regulations, with the addition of some extras such as voltage information and meaning of “B10”.</p> <p>IMMA will continue working on the template shown at SLR-65, intended to allow the comparison of the definitions between R48-09 and R53-04. If possible, this will be presented at SLR-66.</p>	
8.	<p>Any Other Business</p> <p>- <u>GTB idea for new approach to amend the Regulations</u></p> <p>Mr. Bauckhage showed the concept of a new approach, still at a very early stage of discussion in GTB, to address lighting regulations from the perspective of the recipient of the lighting signal and not from the kind of device/lamp or the requirements for the parts (doc. SLR-65-07). He explained the basic idea for an update of the definitions, including the usage of the new definitions of “set”.</p> <p>The general idea was well received by SLR, but more time will be necessary to evaluate the actual benefits of this extensive work. GTB was invited to further develop this idea, including the addition of a problem statement which may help to understand the benefits.</p>	SLR-65-07

	<p>- <u>Edit. check of the formal proposal for 09 series of amendments to R48</u></p> <p>SLR made an editorial check of the draft GRE proposal for 09 series of amendments to R48 that the GRE Secretariat has prepared, based on informal document GRE-89-02-Rev.3, for submission to WP.29 in March 2024. The identified editorial corrections and improvements will be immediately communicated to the GRE Secretariat.</p>	
<p>9.</p>	<p>Next meeting(s)</p> <p>The SLR agreed the following meeting schedule:</p> <ul style="list-style-type: none"> ➤ 66th SLR meeting - Hybrid in Brussels, on 7-9 February 2024 ➤ 67th SLR meeting - Hybrid in Brussels, on 3-5 April 2024 ➤ 68th SLR meeting - Hybrid in Brussels, on 23-26 July 2024 ➤ 69th SLR meeting - Hybrid in Tokyo, on 10-12 September 2024 <p>The SLR session previously planned in May 2024 has been cancelled. In order to recover the time of the cancelled session, the subsequent two sessions (namely SLR-68 and SLR-69) will be extended of one day each, i.e. 6 half-days instead of the customary 4 half-days.</p> <p>Further to the confirmation from more than 10 people to participate in person at the 69th SLR session planned in Tokyo, the meeting was confirmed to be held in Japan. Ms. Fujimoto offered to provide for SLR-66 all the necessary information about the meeting location.</p>	
<p>10.</p>	<p>Closure</p> <p>The Chairman thanked all the participants for their cooperation and productive contributions during 2023. He also thanked CLEPA for hosting SLR in their Brussels offices and closed the meeting extending to all his best wishes for Christmas and the new year.</p>	

Annex 1 to SLR-65-11

Participation at 65th SLR meeting Brussels + WebEx, 13-15 December 2023

13 December 2023	14 December 2023	15 December 2023
Mr. Derwin ROVERS (NL, SLR Chair) *	Mr. Derwin ROVERS (NL, SLR Chair) *	Mr. Derwin ROVERS (NL, SLR Chair) *
Mr. Davide PUGLISI (GTB, SLR Secr) *	Mr. Aleksander LAZAREVIC (EC, SLR Vice-Chair) *	Mr. Davide PUGLISI (GTB, SLR Secr) *
Mr. James ABRAHAM (OICA)	Mr. Davide PUGLISI (GTB, SLR Secr) *	Mr. James ABRAHAM (OICA)
Mr. Patrice BAILLET (FR)	Mr. James ABRAHAM (OICA)	Mr. Patrice BAILLET (FR)
Mrs. Silke BARTON (CLEPA)	Mrs. Elena ANSALONI (IT)	Mrs. Silke BARTON (CLEPA)
Mr. Thomas BAUCKHAGE (CLEPA)	Mr. Patrice BAILLET (FR)	Mr. Thomas BAUCKHAGE (CLEPA)
Mr. Antoine DEPREE (FR)	Mrs. Silke BARTON (CLEPA)	Mr. Ziya Metin COSKUN (OICA)
Mr. Jürgen EWALD (CLEPA)	Mr. Thomas BAUCKHAGE (CLEPA)	Mr. Antoine DEPREE (FR)
Mr. Marc FISCHER (DE)	Mr. Ziya Metin COSKUN (OICA)	Mr. Jürgen EWALD (CLEPA)
Ms. Kiyomi FUJIMOTO (JP)	Mr. Antoine DEPREE (FR)	Mr. Marc FISCHER (DE)
Mr. Manabu FUSHIMI (JP)	Mr. Jürgen EWALD (CLEPA)	Ms. Kiyomi FUJIMOTO (JP)
Mr. Valter GENONE (GTB)	Mr. Marc FISCHER (DE)	Mr. Manabu FUSHIMI (JP)
Mr. Marcin GORZKOWSKI (SAE)	Ms. Kiyomi FUJIMOTO (JP)	Mr. Valter GENONE (GTB)
Mr. Beny GRIGORESCU (GTB)	Mr. Manabu FUSHIMI (JP)	Mr. Mark GRAINGER (OICA)
Mr. Frédéric HAY (CLEPA) *	Mr. Valter GENONE (GTB)	Mr. Beny GRIGORESCU (GTB)
Mr. Pere HERNANDEZ (IMMA) *	Mr. Marcin GORZKOWSKI (SAE)	Mr. Frédéric HAY (CLEPA) *
Mr. Hyunjun JO (KR)	Mr. Mark GRAINGER (OICA)	Mr. Pere HERNANDEZ (IMMA) *
Mr. Dieter KOOß (GTB)	Mr. Beny GRIGORESCU (GTB)	Mr. Hyunjun JO (KR)
Mr. Takahiro KOHYAMA (JP)	Mr. Frédéric HAY (CLEPA) *	Mr. Timo KÄRKKÄINEN (FI)
Mr. Rainer KRAUTSCHEID (DE)	Mr. Pere HERNANDEZ (IMMA) *	Mr. Dieter KOOß (GTB)
Mr. Frederic MASSON (CLEPA)	Mr. Hyunjun JO (KR)	Mr. Takahiro KOHYAMA (JP)
Mr. Kota NAKAHIRA (IMMA)	Mr. Timo KÄRKKÄINEN (FI)	Mr. Frederic MASSON (CLEPA)
Mr. Seiji NEMOTO (JP) *	Mr. Dieter KOOß (GTB)	Mr. Kota NAKAHIRA (IMMA)
Mr. Philipp PLATHNER (IEC)	Mr. Takahiro KOHYAMA (JP)	Mr. Seiji NEMOTO (JP) *
Mr. Jean-Marc PRIGENT (OICA)	Mr. Rainer KRAUTSCHEID (DE)	Mr. Philipp PLATHNER (IEC)
Mr. Seian SATOH (JP)	Mr. Frederic MASSON (CLEPA)	Mr. Seian SATOH (JP)
Mr. Walter SCHLAGER (IEC)	Mr. Kota NAKAHIRA (IMMA)	Mr. Walter SCHLAGER (IEC)
Mrs. Sonia SUDRIE (OICA)	Mr. Seiji NEMOTO (JP) *	Mrs. Sonia SUDRIE (OICA)
Mr. Takashi SUGIURA (IMMA)	Mr. Michael PERNKOPF (CLEPA)	Mr. Takashi SUGIURA (IMMA)
Mr. Tomasz TARGOSINSKI (PL)	Mr. Philipp PLATHNER (IEC)	Mr. Tomasz TARGOSINSKI (PL)
Mr. Wilfried VAN LAARHOVEN (NL) *	Mr. Jean-Marc PRIGENT (OICA)	Mr. Wilfried VAN LAARHOVEN (NL) *
	Mr. Seian SATOH (JP)	
	Mr. Walter SCHLAGER (IEC)	
	Mr. Lukas SCHWENKSCHUSTER (GTB)	
	Mrs. Sonia SUDRIE (OICA)	
	Mr. Takashi SUGIURA (IMMA)	
	Mr. Tomasz TARGOSINSKI (PL)	
	Mr. Wilfried VAN LAARHOVEN (NL) *	

Apologies for absence: Mr. Sebastian FAHR (OICA)

Note: the asterisk "*" indicates those who have participated in person.